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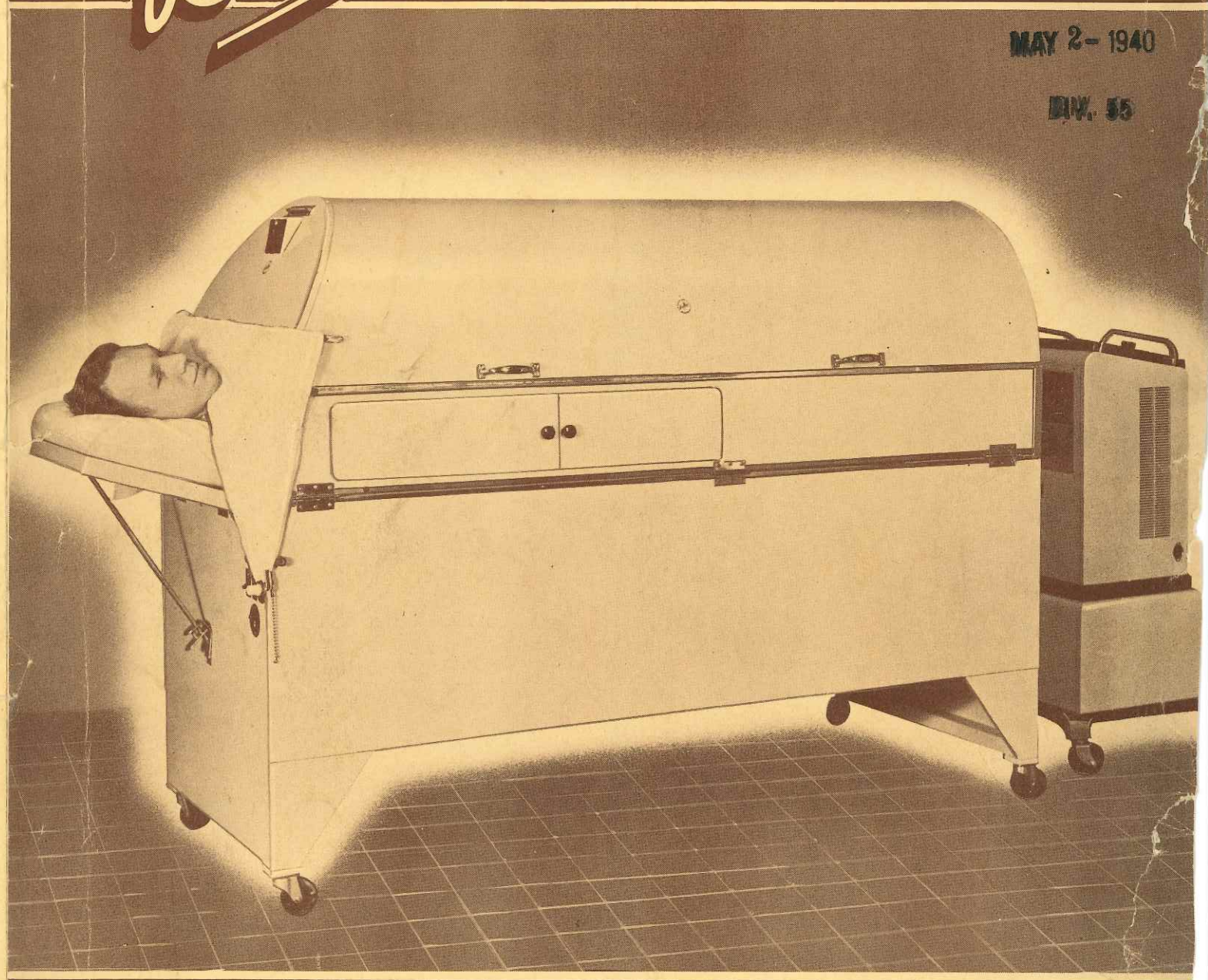
THE

Burdick

FEVER THERAPY CABINET

PATENT OFFICE
MAY 2- 1940
DIV. 55



With

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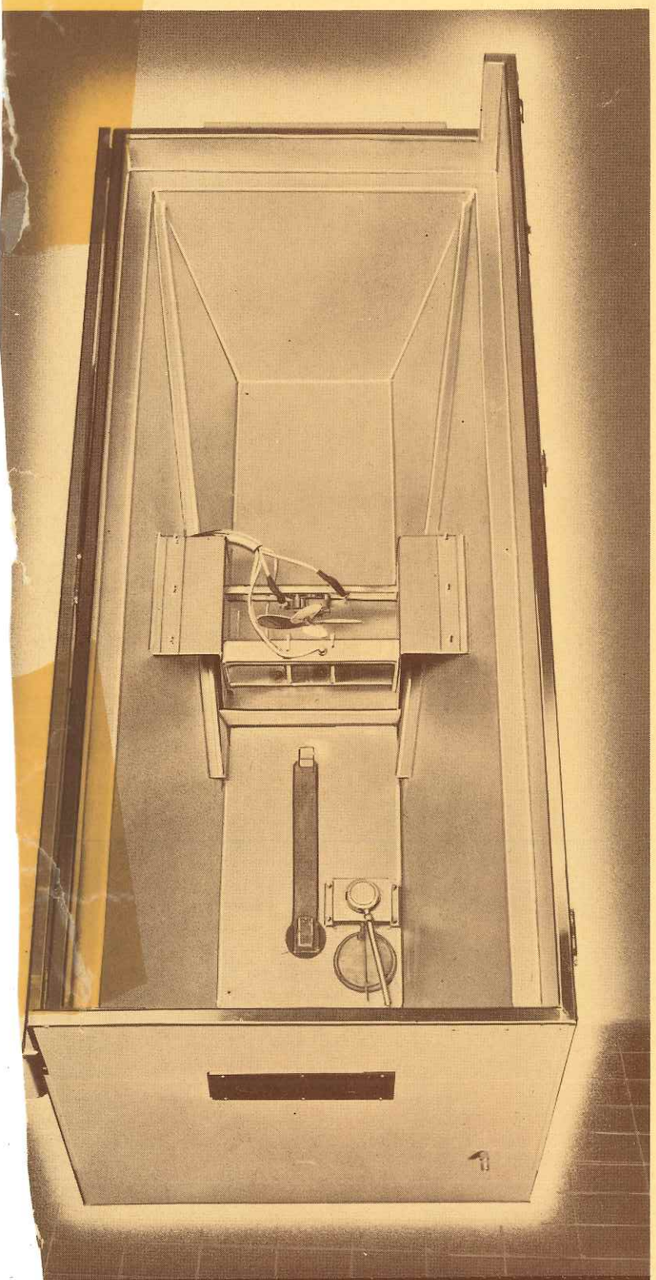
Electromagnetic Induction

THE BURDICK CORPORATION • MILTON, WISCONSI

THE Burdick FEVER THERAPY CABINET USING ELECTROMAGNETIC INDUCTION



ior of the cabinet showing:—Center—heating units irculating fan. Below — Humidifier compartment, g element and float valve regulating flow from ator.

Among the outstanding contributions of this decade is the treatment of disease by induced hyperpyrexia. The success of even such a crude method as the malaria treatment, with its obvious lack of control, showed the therapeutic possibilities of induced fever.

Now, with a better knowledge of the indications and methods of application, fever therapy has become firmly established as an essential therapeutic measure in the treatment of a number of clinical conditions.

Chief among the conditions in which fever therapy is indicated are neurosyphilis and gonorrheal manifestations. Favorable results have also been reported in a number of other conditions, including arthritis, neuritis, chorea, multiple sclerosis and asthma.

It is generally agreed that the best method of elevating the body temperature is by electromagnetic induction and the use of a properly equipped cabinet. The superiority of electromagnetic induction lies in its power to *induce* heat in the body without overheating the surface.

Brought out in the literature is the necessity for having as the source of electromagnetic induction a unit of sufficient power to produce the desired elevation of temperature within a short period.

The purpose of the Burdick Fever Cabinet is to prevent heat loss from the body while temperature is being raised with Electromagnetic Induction Diathermy; also to maintain the temperature at the desired level after the electromagnetic current has been cut off. To do this, cabinet temperatures need be only a degree or two higher than body temperatures.

Also, the cabinet should be comfortable, well insulated, and easy to operate. Air conditioning is essential, and it should be possible to record the rectal temperature without cooling the patient.

The construction of the cabinet permits the induction and maintenance of the cabinet temperature not over 1 to 3° above the rectal temperature in fevers ranging up to 104° F. and not over 2 to 4° above rectal temperature in those fevers ranging from 104 to 106.5° F.

Air Conditioned. The cabinet is equipped with a fan and air deflectors to force *conditioned* air through an opening at the foot of the cabinet, a return being at the head of the cabinet, thus providing a uniform temperature and humidity in all parts of the cabinet interior.

The hinged upper section is provided with flanges so that condensed moisture created by the humidifier is confined within the cabinet.

Convenience. The cabinet has two hinged sections for convenient *accessibility to the patient.* The top section is double wall aluminum construction, hinged to open upward and counterbalanced with special lever and double acting spring check. There is also a drop door eight inches wide extending the entire length of the front of the cabinet and opening on a level with mattress on which patient lies. The drop door is made of aluminum of double wall construction and provided with two sliding doors, housed in the double wall construction, providing an opening 33¾ x 6 inches, said openings having rounded smooth edges.

All switches and controls are also mounted at the head of the cabinet for the *convenience* of the operator.

Freedom of Movement. There is no weight on the patient, and the cabinet is large enough to fit all patients.

The opening at the head of the cabinet is of ample size to prevent any feeling of *constriction* to the patient's neck or shoulders, and is provided with special terry cloth curtain of double thickness with rubber sheeting insert. This construction provides ample freedom for the patient and at the same time prevents escape of moisture and heated air from the cabinet. Three of these curtains are furnished with each unit.

Hairtex Mattress, thick, flexible, covered with rubberized silk provides maximum comfort to patient.

The rack supporting the mattress on which the patient lies is made of hard wood, treated to resist moisture, and supports the inductance cable mounted flush, providing a smooth surface for the mattress.

Other Features. A special *thermometer,* to indicate internal cabinet temperature and a *humidity gauge* indicating relative humidity inside the cabinet, are mounted at the head of the cabinet.

Burdick Fever Therapy Cabinet with Hairtex mattress removed, showing electromagnetic inductance cable in position mounted flush in the hard wood rack supporting the mattress.

Burdick Fever Therapy Cabinet, ready for the patient, showi Hairtex mattress, percolator for water supply and Magnetherm elect magnetic induction unit attached.

The Burdick Fever Therapy Cabinet . . . Effective . . . Convenien

SPECIFICATIONS

Durable Construction. Made of metal throughout. Cover and side drop door, aluminum, double wall construction. Vapor chamber mounted in lower section galvanized alloy steel painted, with soldered joints. Where possible, joints of cabinet electrically welded. Mounted on 3" ball bearing casters.

Humidification. An immersion type *vaporizing unit* of 1000 watt capacity and equipped with a low, medium and high control produces and maintains 95 to 100 percent relative humidity in the cabinet under all surrounding atmospheric conditions. In addition to the vaporizing unit, two Nichrome wire heaters of 300 and 400 watt capacity are provided for additional heating if desired, each unit being controlled by a separate switch so the heaters may be used separately or together.

Air conditioning equipment is in the lower section of the cabinet in a moisture proof container. A constant water level humidifier device using an automatic float valve feeds water from a glass percolator mounted at the foot of the cabinet.

Dimensions.

Length of cabinet (headrest collapsed) 72"

Length of cabinet (headrest in position) 84"

Width of cabinet 29"

Width of cabinet (including counterbalance brackets) 32"

Cabinet height 53½"

Collapsible headrest 12 x 18"

Sliding door opening 33¾ x 6"

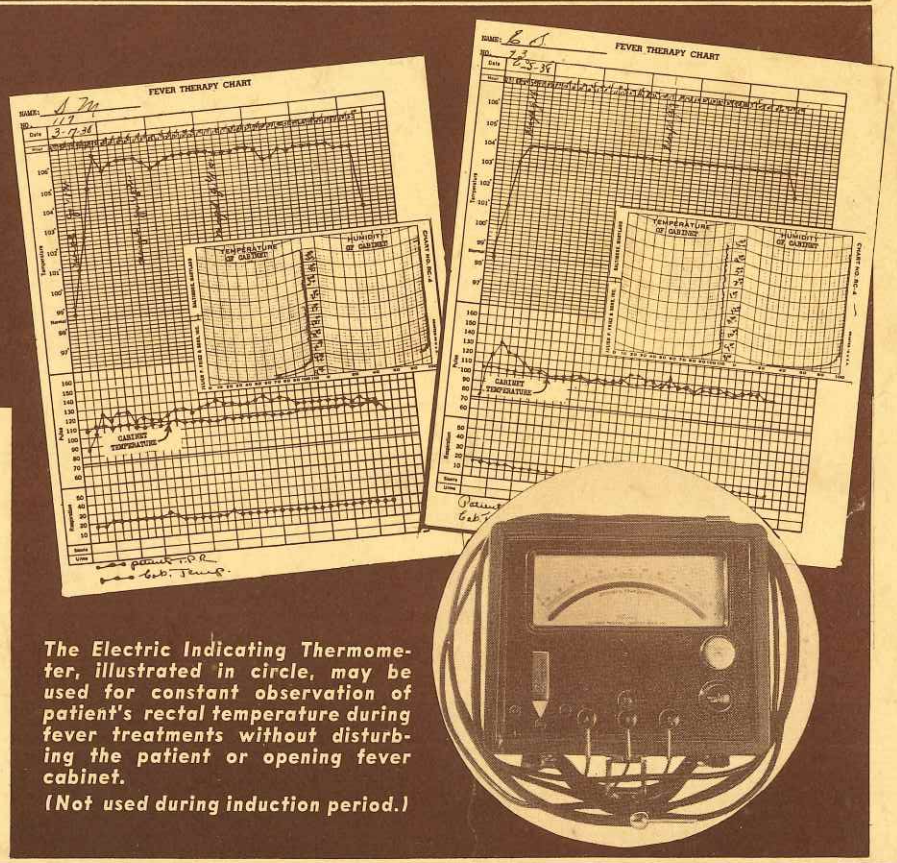
Finish. Ivory exterior, aluminum interior.

Catalog Number. FTC-1 Fever Therapy Cabinet.

Note: The Short Wave Unit pictured with the cabinet is one of the Burdick Magnethern models, SWD-25-C.

Fever Therapy Charts

Here are shown two typical charts of patients treated in the Burdick Fever Cabinet. Note the short time required for raising temperatures to the desired level, the even temperature curve maintained, and the relatively low pulse rates typical with this method of treatment.



The Electric Indicating Thermometer, illustrated in circle, may be used for constant observation of patient's rectal temperature during fever treatments without disturbing the patient or opening fever cabinet.
(Not used during induction period.)

THE BURDICK CORPORATION

MILTON, WISCONSIN

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